

CLAIMS

IAP20 REGISTRATION 11 JAN 2006

1. A stator (3) of an electric machine (1) comprising
5 an autonomous cooling circuit, means for sealing the
cooling circuit with respect to a rotor (2) of the
electric machine (1), a magnetic circuit comprising
slots (14, 20), and a winding (15) arranged in the
10 slots (14, 20), characterized in that the sealing means
comprise a fluidtight shell (9) and in that the stator
3 comprises a two-part magnetic circuit whose two parts
(7, 8) are separated by the shell (9).

2. The stator as claimed in claim 1, characterized in
15 that the shell (9) is of tubular shape and is centered
around an axis (13) of revolution of the electric
machine.

3. The stator as claimed in either of claims 1 and 2,
20 characterized in that the magnetic circuit comprises a
first stack of laminations (7) produced outside the
shell (9) and a second stack of laminations (8)
produced inside the shell (9).

25 4. The stator as claimed in claim 3, characterized in
that the first and the second stacks of laminations (7,
8) comprise slots and in that the slots (20) of the
second stack of laminations (8) are arranged in the
continuation of the slots (14) of the first stack of
30 laminations (7).

5. The stator as claimed in claim 4, characterized in
that the winding (15) is completely situated in the
slots (14) of the first stack of laminations (7).

35

6. The stator as claimed in either one of claims 4
and 5, characterized in that the second stack of

laminations (8) comprises bridges (21) which close the slots (20) of the second stack of laminations (8), the bridges (21) being situated in the immediate vicinity of a gap (25) of the electric machine.

5

7. The stator as claimed in one of the preceding claims, characterized in that the shell (9) is formed by a coating of one of the stacks of laminations (7 or 8).